Date: February 28, 2017

Presenter: Review of Community Development Department's Capabilities and Practices Related to Groundwater

Quality, Tammy Wittmer, Land Conservation Planner, St. Croix County

## **Key Impacts:**

11 municipalities provide drinking water for 41,513 residents; ~ 42,832 use private wells (2010 county pop: 84,345)

- County identified areas of concern: atrazine prohibition areas and deep well casing areas
- County has followed up to reporting trends of Brown Water Events from citizens. Event occurred in Emerald in 2009, which prompted county follow up and program.
- Lenders are requiring some home buyers to meet specific well and septic system requirements.

## **Data Needs or Gaps:**

- Scientific-testing methods for water quality needs to be established to create a baseline testing level, quality control and consistent program with goals
  - Current program is voluntary and samples are taken by homeowner; cost on owner
  - Not all data collected by private labs are shared with the county, unless homeowner selects checkbox to share data with government. This is true of lender requirements.
  - Data reported by different labs is not consistent
  - Expansion of program suggestion: Look at areas of focus first, hot spots/historical problems
- Need to analyze data to evaluate for goals, trends based on repeat tests and trends on time of year effect for water quality in our area
- Establishing more accurate data and maps for Karst and sinkholes in our area
- Data is lacking on the number of High Capacity Wells, as well as the depth to aquifer they draw from and the general impact on ground and surface water. Do those who own High Capacity Wells control our water? What should our county role be?

# **Policy or Program Gaps:**

Current programs: Volunteer Well Water Testing Program, paid by citizens; Safe Medication Disposal Program; Community Groundwater Education for youth; County Areas of Concern (Atrazine prohibition area and deep well casing areas); and Brown Water Events CDD follow up and action

#### Gaps:

- Up-to-date mapping of well quality, karst areas and other factors that impact water quality
- Need for more formalized well water testing program
- Increased education for the value of water quality, water quality education, well testing programs, as well as the importance of knowing the water quality in our area for both general citizens, agriculture, and other businesses
- Take existing programs and make it work better for farmers: Farmer-Led Watershed Groups and other outreach
- How do we plan for the future use (30 years and on) of ground water so we are supporting a vibrant agricultural and rural community in St. Croix County?
- Cost and staff time of conducting water testing and evaluating results.
- Lab testing issues:
  - Stevens Point lab is backed up on work. Results/reports differ by lab making data sets hard to compare.
  - Taking water samples can be complicated for average person
  - Test samples can be expensive for citizens
  - The county is not getting all the data (DNR and other testing)
- Number of wells only known for wells is since 1988; citizens are not required to test regularly or take corrective
  actions. How many pre-1988 well exist? How many are maintained or not used, but not officially abandoned?
- Atrazine prohibition area and deep well casing areas. Has there been follow up testing of water quality in these areas? Are other areas being monitored for atrazine?
- Should there be restrictions on farming on sinkhole or karst locations?
- More information is needed from DNR on permitting and what they do for groundwater. (presenter?)

## **Opportunities for Action:**

- Improve our outreach and participation in well water quality testing
- Required well water testing and reporting to county. Use one uniform lab test, establish consistent program.
- Look at cost share programs or ways to help fund the testing
- · Establish a scientifically sound data collection process of water quality data and establish benchmark data
- Utilize UW-Stout professor's offer to assist with research on St. Croix County water quality. Contact information: Innisfree McKinnon, <a href="mailto:mckinnoni@uwstout.edu">mckinnoni@uwstout.edu</a> Wisconsin Farmers Union also offered to help with funding.
- Identifying sink holes locations using contour data from GIS data and follow up with field identification (Wittmer)
- More soil health education and how it impacts our water quality for agriculture and homeowners